

**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In reapplication of: Jesse PEDIGO, et al.

Group No.: 1725

Application No.:

10/039,942

Examiner:

Not Yet Assigned

Filed:

**January 3, 2002** 

For:

**Etched Hole-Fill Stand-Off** 

Box DD **Assistant Commissioner for Patents** Washington, D.C. 20231

THE STATE OF THE S TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT WITHIN THREE MONTHS OF FILING OR **BEFORE MAILING OF FIRST OFFICE ACTION (37 C.F.R. 1.97(b))** 

## IDENTIFICATION OF TIME OF FILING THE ACCOMPANYING INFORMATION DISCLOSURE STATEMENT

The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last. 37 C.F.R. 1.97(b).

Date: April 2, 2002

By:

David J. Zoetewey

Respectfully submitted.

Reg. No. 45,258

Attorneys for Applicant Rutan & Tucker, LLP 611 Anton Blvd., 14<sup>th</sup> Floor Costa Mesa, CA 92835

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**CERTIFICATE OF MAILING (37 C.F.R. 1.8(a))** 

I hereby certify that, on the date shown below, this correspondence is being deposited with the United States Postal Service with sufficient postage as Pirst Class Mail, in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C.

Date: April 2, 2002

Honeywell's Docket No. H0003369 DIV (4960)
Peractitioner's Docket No. 100665.0053US1

APR 0 8 2002

## IN THE UNITED STATE PATENT AND TRADEMARK OFFICE WASHINGTON, D.C. 20231

re application of: Jesse PEDIGO, et al.

Group: 1725

Serial No: 10/039,942

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RECEIVED

TC 1700

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For:

**Etched Hole-Fill Stand-Off** 

INFORMATION DISCLOSURE STATEMENT

Box DD Assistant Commissioner of Patents Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure imposed by 37 C.F.R. § 1.56 to inform the United States Patent and Trademark Office of all references coming to the attention of the Applicant(s) or attorneys or agents for Applicant(s) which are or may be material to the examination of the subject application, attorneys for the Applicant(s) hereby invite the Examiner's attention to the references listed in the accompanying PTO Form 1449 entitled "List of References Cited".

This submission is understood to complement the results of the Examiner's own independent search. The submission of this Disclosure Statement should not be construed as a representation that a search was made, or that the cited items are inclusive of all relevant and material citations that may be available publicly.

"Honeywell's Docket No. H0003369 DIV (4960) Practitioner's Docket No. 100665.0053US1

Applicant(s) respectfully request that the Examiner review the foregoing references, as set forth in the Form PTO-1449, and that they be made of record in the file history of the above-captioned application.

Respectfully submitted,

Rutan & Tucker, LLP

Dated: April 2, 2002

David J. Zoetewey Reg. No. 45,258

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# LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary) APR 0 8 2007 APR 0 8 2007

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	3,601,523	08/24/71	Through Hole Connectors	174	68.5	06/19/70
	4,106,187	08/15/78	Curved Rigid Printed Circuit Boards	29	625	01/16/76
	4,283,243	08/11/81	Use of Photosensitive Stratum to Create Through-Hole Connections in Circuit Boards	156	237	03/20/80
	4,360,570	11/23/82	Use of Photosensitive Stratum to Create Through-Hole Connections in Circuit Boards	428	596	06/15/81
	4,622,239	11/11/86	Method and Apparatus for Dispensing Viscous  Materials	427	96	02/18/86
	4,700,474	10/20/87	Apparatus and Method for Temporarily Sealing Holes in Printed Circuit Boards	29	846	11/26/86
	4,777,721	10/18/88	Apparatus and Method for Temporarily Sealing Holes in Printed Circuit Boards Utilizing a Thermodeformable Material	29	846	10/15/87
	4,783,247	11/8/88	Method and Manufacture for Electrically Insulating Base Material Used in Plated-Through Printed Circuit Panels	204	181.1	05/15/86
	4,884,337	12/05/89	Method for Temporarily Sealing Holes in Printed Circuit Boards Utilizing a Thermodeformable Material	29	846	10/15/87
	4,954,313	09/04/90	Method and Apparatus for Filling High Density Vias	419	9	02/03/89
	4,964,948	10/23/90	Printed Circuit Board Through Hole Technique	156	659	11/13/89
	4,995,941	02/26/91	Method of Manufacture Interconnect Device	156	630	05/15/89
	5,053,921	10/01/91	Multilayer Interconnect Device and Method of Manufacture Thereof	361	386	10/23/90
	5,058,265	10/22/91	Method for Packaging a Board of Electronic Components	29	852	09/10/90
	5,117,069	05/26/92	Circuit Board Fabrication	174	261	09/28/90
	5,133,120	07/28/92	Method of Filling Conductive Material into Through Holes of Printed Wiring Board	29	852	03/15/91
	5,145,691	09/08/92	Apparatus for Packing Filler into Through-Holes or the Like in a Printed Circuit Board	425	110	03/22/91
	5,220,723	06/22/93	Process for Preparing Multi-Layer Printed Wiring Board	29	830	11/04/91
	5,274,916	01/04/94	Method of Manufacturing Ceramic Multilayer Electronic Component	29	848	12/17/92

101	)(E)	5,277,854 %	01/11/94	Methods and Apparatus for Making Grids from Fibers	264	86	06/06/91	
,' APR	8 <b>200</b>	5,\$32,439 2 <u>u</u>	07/26/94	Screen Printing Apparatus for Filling Through-Holes in Circuit Board with Paste	118	213	08/18/92	
THE PROPERTY OF THE PROPERTY O	AAF	\$\$540,779	07/30/96	Apparatus for Manufacture of Multi-Layer Ceramic Interconnect Structures	118	692	03/01/95	
	31/1-2	5,766,670	06/16/98	Via Fill Compositions for Direct Attach of Devices and Methods for Applying Same	427	8	11/17/93	
		5,578,151	11/26/96	Manufacture of A Multi-Layer Interconnect Structure	156	64	03/01/95	
		5,591,353	01/07/97	Reduction of Surface Copper Thickness on Surface Mount Printed Wire Boards with Copper Plated Through Holes by the Chemical Planarization Method	216	18	08/18/94	
		5,610,103	03/11/97	Ultrasonic Wave Assisted Contact Hole Filling	437	225	12/12/95	
		5,637,834	06/10/97	Multilayer Circuit Substrate and Method for Forming Same	174	264	02/03/95	
		5,662,987	09/02/97	Multilayer Printed Wiring Board and Method of Making Same		209	02/01/96	
		5,699,613	12/23/97	Fine Dimension Stacked Vias for a Multiple Layer Circuit Board Structure		852	09/25/95	
		5,707,575	01/13/98	Method for Filling Vias in Ceramic Substrates with Composite Metallic Paste	264	104	07/28/94	
		5,744,171	04/28/98	System for Fabricating Conductive Epoxy Grid Array Semiconductor Packages	425	110	05/12/97	
		5,744,285	04/28/98	Composition and Process for Filling Vias	430	318	07/18/96	
	A 0	5,753,976	05/19/98	Multi-Layer Circuit Having a Via Matrix Interlayer Connection	257	774	06/14/96	
		5,761,803	06/09/98	Method of Forming Plugs in Vias of A Circuit Board by Utilizing a Porous Membrane	29	852	06/26/96	
		5,766,670,	06/16/98	Via Fill Compositions for Direct Attach of Devices and Methods for Applying Same		8	11/17/93	
		5,822,856	10/20/98	Manufacturing Circuit Boards Assemblies Having Filled Vias		832	06/28/96	
		5,824,155	10/20/98	Method and Apparatus for Dispensing Viscous Material	118	410	11/08/95	
FOREIGN F	FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION  YES NO	
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in conformance and not considered. Include copy of this form with next communication to applicant.								

## LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary) APR 8 8 2002 ATY, DOCKETNO. 100665.0053US1 10/039,942 APR 0 9 2002725

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIAT
	5,851,344	12/22/98	Ultrasonic Wave Assisted Contact Hole Filling	156	379.6	12/22/98
	5,906,042	05/25/99	Method and Structure to Interconnect Traces of Two Conductive Layers in a Printed Circuit Board	29	852	10/04/95
	5,925,414	07/20/99	Nozzle and Method for Extruding Conductive Paste into High Aspect Ratio Openings	427	282	07/20/99
	5,994,779	11/30/99	Semiconductor Fabrication Employing a Spacer Metallization Technique	257	773	05/02/97
	6,000,129	12/14/99	Process for Manufacturing a Circuit with Filled Holes	29	852	03/12/98
	6,009,620	01/04/00	Method of Making a Printed Circuit Board Having Filled Holes	29	852	07/15/98
	6,079,100	06/27/00	Method of Making a Printed Circuit Board Having Filled Holes and Fill Member for Use Therewith	29	852	05/12/98
	6,090,474	07/18/00	Flowable Compositions and Use in Filling Vias and Plated Through-Holes	428	209	07/18/00
	6,015,520	01/18/00	Method for Filling Holes in Printed Wiring Boards	264	104	05/15/97
	6,106,891	08/22/00	Via Fill Compositions for Direct Attach of Devices and Method for Applying Same	427	97	12/18/98
	6,138,350	10/31/00	Process for Manufacturing a Circuit Board with Filled Holes	29	852	02/25/98
	6,149,857	11/21/00	Method of Making Films and Coatings Having Anisotropic Conductive Pathways Therein	264	429	12/22/98
	6,153,508	11/28/00	Multi-Layer Circuit Having a Via Matrix Interlayer Connection and Method for Fabricating the Same	438	622	02/19/98
	6,184,133	02/06/01	Method of Forming an Assembly Board with Insulator Filled Through Holes	438	667	02/18/00
	6,261,501	07/17/01	Resin Sealing Method for A Semiconductor Device	264	272.15	01/22/99
	6,276,055	08/21/01	Method and Apparatus for Forming Plugs in Vias of a Circuit Board Layer	29	852	09/24/98
	6,281,448	08/28/01	Printed Circuit Board and Electronic Components	174	260	08/10/99
	6,282,782	09/04/01	Forming Plugs in Vias of Circuit Board Layers and Subassemblies	29	852	09/02/99

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	Via Etching Process, February 1972	RECEIVE
	Multilayer Printed Circuit Board Connections, April 1996	APR Q 9 2000
	Process for Forming Copper Clad Vias, August 1989	TC 4 700
EXAMINER		DATE CONSIDERED
	Initial if reference considered, whether or not citation is in conform nee and not considered. Include copy of this form with next communications.	